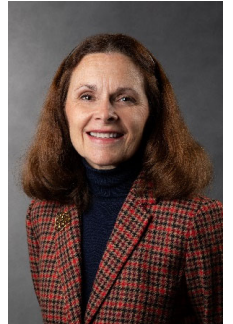

Critical Food Service Budget Metrics

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Your Presenters

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Affiliations and Financial Disclosures

Carolyn Thomas

Affiliations: Nothing to disclose

Mary Darnton

Affiliations: Nothing to disclose

Financial Management of Child Nutrition Program

Food Service Fund vs. General Fund

- Separate accounts
- Food Service is a non-profit entity/break even program
- Food Service shortfalls made up from General Fund

A quality program is financially sustainable and nutritionally sound

Critical Food Service Budget Metrics

Overview: Identify and define metrics

- Average Daily Participation (ADP)
- Food Cost – Usage and Raw Cost
- Meal Equivalents
- Labor Productivity: Meals Per Labor Hour (MPLH)
- Break Even Analysis

Building Blocks: Average Daily Participation (ADP)

Importance and Usage of ADP Data

- Prevent over and under production of food
- Refine scheduling
- Track trends
- Identify areas for growth
- Measure growth over time
- Gauge customer satisfaction
- Evaluate new items

Building Blocks: Average Daily Participation (ADP)

$$\text{ADP} = \frac{\text{\# of Meals served}}{\text{\# of Operating Days}}$$

$$\text{ADP Rate} = \frac{\text{Lunch (or Breakfast) ADP}}{\text{Average Daily Attendance}}$$

Building Blocks: Average Daily Participation (ADP)

Factors Affecting ADP

- Student age/grade level
- Percent Paid, Free, and Reduced-Price meals
- Location/Campus
- Outside competition
- Type of production (onsite vs. satellite)
- Price

Building Blocks: Average Daily Participation (ADP)

Example: ADP and ADP Rate Calculation

| Building Name | Enrollment | ADA 93.80% | # of Bfast Meals Served | # of Lunch Meals Served | # of Operating Days | Bfast ADP | ADP Rate BFAST | Lunch ADP | ADP Rate LUNCH |
|-------------------|------------|---------------|-------------------------------|----------------------------------|---------------------------|-----------|-------------------|-----------|-------------------|
| Apple Elementary | 534 | 501 | 1956 | 5638 | 18 | 109 | 21.7% | 313 | 62.5% |
| Oak Middle School | 1256 | 1178 | 3776 | 7405 | 18 | 210 | 17.8% | 411 | 34.9% |
| Hightown High | 2356 | 2210 | 4123 | 11332 | 18 | 229 | 10.4% | 630 | 28.5% |

Building Blocks: Food Cost

Why calculate the cost of food?

- To determine if costs are within budget guidelines
- To ascertain if there are sufficient funds to pay expenditures
- To establish the cost for each meal equivalent served
- To prevent waste and food theft through monitoring food usage

Raw Food Cost: the actual cost of each menu item or combination of items

Food Cost Percentage: Cost of Food Used or Purchased as a percentage of revenue

Building Blocks: Food Cost

- Vitally important to determine what your Raw Food Cost is, by costing out each individual menu item; this is ongoing
- For budgeting, calculating total cost of food as a Percentage will allow for changing participation levels
- USDA's 2019 School Nutrition and Meal Cost Study revealed a national average food cost of 44.7%
- Industry Standard: 42-46% Food Cost

Building Blocks: Food Cost Usage

| | | |
|-------|--------------------------|----------|
| | Beginning Food Inventory | \$10,000 |
| + | Total Food Purchases | \$20,000 |
| <hr/> | | |
| = | Total Food Available | \$30,000 |
| - | Ending Food Inventory | \$7,000 |
| <hr/> | | |
| = | Cost of Food Used | \$23,000 |

Building Blocks: Meal Equivalents (MEQ's)

Meal Equivalents

- Statistical tool to standardize unique mix of services into one unit
- Standard unit can be used to determine meal costs, labor ratios, and revenue
- Evaluate productivity and efficiency of program
- Help establish performance benchmarks

Building Blocks: Meal Equivalents (MEQ's)

By converting food sales to meal equivalents, the school nutrition director can determine

- Meal Cost
- Labor Productivity Ratios (MPLH)
- Average revenue earned per meal/meal equivalent

Building Blocks: Meal Equivalents (MEQ's)

Institute for Child Nutrition Meal Equivalent Ratios:

- **One** school lunch and/or supper equals **one** meal equivalent (1:1)
- **Three** school breakfasts count as **two** meal equivalents (3:2)
- **Three** snacks equal **one** meal equivalent (3:1)
- Non-program food sale revenue (a la carte, catering, vending, adult meals) is divided by the Meal Equivalency Factor (MEF).
- The MEF is established by MDE annually & is based on the current federal reimbursement rate plus USDA Foods value per meal.
- Current MEF: 2021-22: \$3.825

Note: Meal equivalent ratios may vary from state to state

Building Blocks: Meal Equivalents (MEQ's)

| Meal Categories | Total Meal Units or Sales | Conversion Factor | Total Meal Equivalents | # of Serving Days | Average Daily Meal Equivalents |
|------------------------|---------------------------|-------------------|------------------------|-------------------|--------------------------------|
| Student Lunch | 1,000 | 1 | 1,000 | 5 | 200 |
| Adult Lunch | 100 | 1 | 100 | 5 | 20 |
| Student Breakfast | 3,500 | 0.67 | 2,345 | 5 | 469 |
| Snacks | 500 | 0.33 | 165 | 5 | 33 |
| Supper | 500 | 1 | 500 | 5 | 100 |
| Non-Program Food Sales | \$1,000.00 | \$3.825 | 261 | 5 | 52 |
| Totals | | | 4,371 | | 874 |

Building Blocks: Meals Per Labor Hour (MPLH)

The importance of knowing MPLH standards

- Meal Equivalent calculation needed to determine MPLH
- Together they give an understanding of labor and food cost
- Monitor efficiency
- Manage staffing by reducing or increasing work hours
- Manage menu to control labor
- Creates incentive to increase participation

Building Blocks: Meals Per Labor Hour (MPLH)

How to Calculate MPLH:

MPLH = Total meal equivalents ÷ Total number of labor hours

Factors Affecting Meals Per Labor Hour

- Number of serving lines/cashiers
- Service times and duration
- Employee skill/tenure
- Menu complexity
- Production and preparation time
- Equipment
- Kitchen layout

Building Blocks: Meals Per Labor Hour (MPLH)

Calculating MPLH: Calculate current total hours of labor paid daily by building

| Name of Building: | Number of Staff | Daily Hours | Total Number of Labor Hours | Total Average Daily Meal | Meals Per Labor Hour (by building) |
|----------------------------------|-----------------|-------------|-----------------------------|--------------------------|------------------------------------|
| Apple Elementary School | 1 | 5 | 5 | | |
| | 2 | 3.5 | 7 | | |
| Labor Hours from other buildings | 1 | 2.5 | 2.5 | | |
| Totals | | | 14.5 | 331 | 22.8 |
| Oak Middle School | 2 | 8 | 16 | | |
| | 4 | 5 | 20 | | |
| | 3 | 3.5 | 10.5 | | |
| Totals | | | 46.5 | 877 | 18.9 |

Meals Per Labor Hour (MPLH) - the most common measure of productivity in School Nutrition Programs

Calculation:

$$\frac{\text{number of meals/meal equivalents}}{\text{number of paid labor hours}}$$

Staffing Guidelines for On-Site Production

| Number of Meals/Meal Equivalents ¹ | MEALS PER LABOR HOUR FOR LOW AND HIGH PRODUCTIVITY | | | |
|---|--|------|--------------------------------------|------|
| | Conventional System MPLH ² | | Convenience System MPLH ³ | |
| | Low | High | Low | High |
| Up to 100 | 8 | 10 | 10 | 12 |
| 101-150 | 9 | 11 | 11 | 13 |
| 151-200 | 10-11 | 12 | 12 | 14 |
| 201-250 | 12 | 14 | 14 | 15 |
| 251-300 | 13 | 15 | 15 | 16 |
| 301-400 | 14 | 16 | 16 | 18 |
| 401-500 | 14 | 17 | 18 | 19 |
| 501-600 | 15 | 17 | 18 | 19 |
| 601-700 | 16 | 18 | 19 | 20 |
| 701-800 | 17 | 19 | 20 | 22 |
| 801 and up | 18 | 20 | 21 | 23 |

¹ Meal equivalents (MEQ) include breakfast, snacks and a la carte sales. Lunch 1:1, Breakfast 3:2, Snack 3:1, A la carte MEQ = sales revenue divided by the amount of free lunch reimbursement plus the USDA food entitlement.

² Conventional system is preparation of some foods from raw ingredients on premises (using some bakery breads and prepared pizza and washing dishes)

³ Convenience system is using maximum amount of processed foods (e.g. using all bakery breads, precooked chicken, ready to serve raw fruits and vegetables, pre-portioned condiments and washing only trays and using disposable dinnerware)

Source: Pannell-Martin 1999

Determining Meal Equivalency

| | | | | |
|---|---|--|---|------------------------------|
| Student breakfast meals served (3:2) | x | 0.67 | = | Breakfast meal equivalents |
| Student lunch meals served (1:1) | x | 1.0 | = | Lunch meal equivalents |
| Student snack meals served (3:1) | x | 0.33 | = | Snack meal equivalents |
| Non-program \$\$ (Free Reimb. Rate + USDA Foods value)* | ÷ | (\$x.xx + \$.xx) (\$3.37 + \$.235)* | = | Non-program meal equivalents |

*This number is subject to change annually with reimbursement rate increases



Building Blocks: Break-Even Analysis

What?

Break-Even Analysis is the amount of sales needed to cover both fixed and variable costs/expenses.

Why?

Use Break-Even Analysis for decision making and/or program expansion

When?

Anytime – but particularly heading into Budget Season

How?

Building Blocks: Break-Even Analysis

Break-Even Analysis

*Break-Even Point (BEP) is the amount of sales needed to cover Fixed & Variable costs.
The BEP is the point where total Revenues & Total expenses are equal.*

Fixed Cost Analysis:

| | |
|---|-----------------|
| Driver (\$20.5 x .5 hrs) Transportation of Food | \$10.25 |
| On-Site Staff Hours (\$16.57/hr wage x 6.5 labor hours) | \$107.70 |
| Subtotal | \$117.95 |
| 33% Fringe on Driver & Prep worker hours | \$41.28 |
| Total Fixed Costs | \$159.23 |

Fixed Costs (Labor & Fringe) \$159.23
Variable Costs (Food, Disposables, Other) 48%

Fixed Costs ÷ Variable Costs = Break Even Point **\$331.73** **Break Even Point**
(\$159.23 ÷ 48% = \$331.73)

Reimbursement Rate \$3.82

\$331.73 (BEP) / \$3.82 (Reimb. Rate) = 87 meals per day
87 meals per day x \$3.82 = \$331.73 **87** **Required Avg Daily Participation**
\$331.73 **Required Avg Daily Revenue**



Impact of COVID on Budget Process

COVID/Supply Chain/Staffing changed everything!

How does this impact your budget?

Metrics will help create different scenarios

- Establish metrics based on actual performance from 2018-19 and Pre-Pandemic 2019-20
- Use 20-21 or 21-22 data either for comparison or budgeting

Using Data to Drive Decisions

So what now??

Using them already? Great! Refine, Drill Down

Not using them? Start now!

We are here to help!

We Remember...

20% of what we hear.

30% of what we see.

50% of what we see and hear.

70% of what we see, hear, and say.

90% of what we see, hear, say, and do.

Thank You!

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